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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,419	01/10/2002	Stefan Blomgren	HPX0072-PCT	8781

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EXAMINER

LOWE, MICHAEL S

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,419

Applicant(s)

BLOMGREN ET AL.

Examiner

M. Scott Lowe

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Election/R strictions

Applicant's election with traverse of the election of species in Paper No. 11 is acknowledged. The traversal is on the ground(s) that applicant believes the search for the species would not be a serious additional burden. This is not found persuasive because it would be a serious burden since additional inventions would have to be searched and additional classes or subclasses may also need searching.

The requirement is still deemed proper and is therefore made FINAL.

Drawings & Specification

The drawings are objected to because figures 5,6,7,8, & 11 are not properly numbered (i.e. 5A, 5B, etc.) nor are they properly noted in the "Brief Description of the Drawings" section of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 states "and/or" in line 7, which is unclear. For sake of examination it is assumed that "and" was meant.

Claim 1 recites the limitation "the workpiece" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "a work object" in both line 1 and line 7. It is unclear if they are the same or different items. It is assumed for sake of examination that all instances of "work object" and "work piece" refer to the same item.

Claims 5 & 6 recite the limitation "teach in" which is unclear and lacks sufficient details to distinctly point out the claimed subject matter.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For sake of examination, this limitation will not be considered as a further limitation.

Claim 1 states, "transfer a work object..." then later "*preferably* from one workstation to another". The use of "preferably" renders the claim indefinite since it is not clear whether the information that follows is actually being claimed as a limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588).

Re claims 1,2, Muller teaches a method for rapid transfer of a work object in both the horizontal and vertical directions using a robot unit having a gripping mechanism 20, the workpiece weighing between one kilo and forty kilos and transfer it in the horizontal direction 1 to 10 meters along a beam member 12; the robot 14 controlled by a control unit and driven by a single belt 22 and at least 2 motors 32, 40 comprising rotor unit connected to the drive wheels; the motors immovably arranged in relation to workstations (not numbered) and transfer of the work object done without displacement of the motors; the movement along a pre-programmed path monitored and controlled continuously through registration of the situation of each of the rotors forming part of the motors. Muller is silent on moving a work object beyond the beam end situation but Crorey teaches handling an object beyond an end situation (figure 16) in order to reach locations located beyond the beam end situation (implicitly stated in the figures). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Crorey to have the gripper capable of handling an object beyond an end situation in order to reach locations located beyond the beam end situation.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588), Liljengren (US 5,520,502) and Brake (EP 180,050).

Re claim 3, Muller is silent on intermediate storage of the work object and having multiple grippers. Liljengren teaches use of two grippers in order to effect varied transfer of the object (column 6, paragraph 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Muller by Liljengren to have two grippers in order to allow a varied transfer of the object. Brake teaches intermediate storage of the work object (figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Brake in order to intermediate storage to allow a process step be done on the object prior to it being transferred to the next work station.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588) and Dixon (US 3,958,740).

Re claims 5-8, Muller is silent on a "teach-in process" but Dixon teaches a "teach-in process" (column 3, 2nd paragraph from bottom) to allow to for easier programming (column 4, paragraph 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Dixon to have a "teach-in process" to allow to for easier programming.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588), Dixon (US 3,958,740), Liljengren (US 5,520,502) and Brake (EP 180,050).

Re claim 9, Muller is silent on intermediate storage of the work object and having multiple grippers. Liljengren teaches use of two grippers in order to effect varied transfer of the object (column 6, paragraph 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Muller by Liljengren to have two grippers in order to allow a varied transfer of the object. Brake teaches intermediate storage of the work object (figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Brake in order to intermediate storage to allow a process step be done on the object prior to it being transferred to the next work station.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okugi (US 6,379,103) teaches an intermediate table (3) for doing a process step prior to moving the object to the next workstation.

Costa (US 5,476,358) teaches a single belt drive for multidimensional movement device.

Inaba (US 4,511,985) teaches a teach-in process.

Guarini (WO 96/37346) teach a single belt, 2 motor multidimensional device.

Art Unit: 3652

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is 703-305-1940. The examiner can normally be reached on 6:30am-4:30pm M,Tu,Th,F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

msl



EILEEN D. LILLIS
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